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SEMINARIO DE GEOMETRIA ALGEBRAICA

Martes, 23 de mayo de 2017, **13:00**, Seminario 238

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Impartirá la conferencia

A new kind of companion matrix

Resumen.

Investigating of a special companion matrix for the Mandelbrot polynomials that was invented by Piers W. Lawrence, we found that we could easily extend the construction to similar recursively-constructed polynomial families. After Donald Knuth asked us if we could do this for polynomials related to what he called *Euclid Numbers*, i.e. $E_{n+1} = E_1, E_2 \dots E_n + 1$, we discovered that we could. This led us to a general construction which gives a genuinely new kind of companion matrix. Apparently, that gives a new linearization for matrix polynomials, as well.